

Opportunity Title: Integrated Environmental Modeling
Opportunity Reference Code: EPA-ORD-NERL-SED-2019-13-A

Organization U.S. Environmental Protection Agency (EPA)

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How to Apply **This is a repost of a previous posting. If you previously submitted your application to this reference code without the “-A” at the end, then you do not need to reply. Example: If you applied to “EPA-ORD-NERL-IO-2020-13” you do not need to reapply to “EPA-ORD-NERL-IO-2020-13-A”.**

A complete application consists of:

- An application
- Transcript(s) – For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. All transcripts must be in English or include an official English translation. Click [here](#) for detailed information about acceptable transcripts.
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional recommendations

All documents must be in English or include an official English translation.

If you have questions, send an email to EPArpp@oraui.org. Please include the reference code for this opportunity in your email.

Application Deadline 6/30/2020 3:00:00 PM Eastern Time Zone

Description *Applications will be reviewed on a rolling-basis.

A research opportunity is available at the Environmental Protection Agency (EPA), Office of Research and Development (ORD), National Exposure Research Laboratory (NERL), Systems Exposure Division (SED) located in Research Triangle Park, North Carolina.

EPA ORD's Research Programs include: Safe and Sustainable Water Resources (SSWR) Research Program, Chemical Safety for Sustainability (CSS) Research Program and Sustainable and Healthy Communities (SHC) Research Program. The goal of project SSWR 4.03: "Science to Improve Nutrient Management Practices, Metrics of Benefits, Accountability and Communication" is to improve our scientific understanding of the systems of best management practices (BMPs) that most effectively address nutrient issues and the breadth of implementation that is needed before positive results can be achieved and measured at different watershed scales and for different endpoints (e.g., target nutrient concentrations, loads, and eutrophication response).

This research opportunity will address the driving question: can we effectively summarize the expected results from BMP specific projects to promote several key activities on a broad-scale or at least for large portions of the country? Thus, this research may include approaches (monitoring and modeling) to verify the projected nutrient reductions afforded by BMPs. The research project will provide optimized solutions for sustainable nutrient management and eventually provide comprehensive evaluations on nutrient sources, fate and transport within large river basins such as the Mississippi River Basin under the impact of land use and land management change, climate change and implementation of the Clean Air Act.

The research participant may have the opportunity to be involved in understanding the impact of



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Clear Air Act and climate changes on nitrogen source, fate and transport in the large river basins.

The mentor for this project will be Yongping Yuan (yuan.yongping@epa.gov).








This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and EPA. The initial appointment is for one year, but may be renewed upon recommendation of EPA and is contingent on the availability of funds. The participant will receive a monthly stipend commensurate with educational level and experience. Proof of health insurance is required for participation in this program. The appointment is full-time at EPA in the Research Triangle Park, North Carolina, area. Participants do not become employees of EPA, DOE or the program administrator, and there are no employment-related benefits.

Completion of a successful background investigation by the Office of Personnel Management (OPM) is required for an applicant to be on-boarded at EPA. OPM can complete a background investigation only for individuals, including non-US Citizens, who have resided in the US for the past three years.

Qualifications The qualified candidate should have received a doctoral degree in one of the relevant fields, or be currently pursuing the degree and will reach completion by June 30, 2020. Degree must have been received within five years of the appointment start date.

Experience with geographic information systems and hydrological and water quality modeling is desirable.

- Eligibility Requirements**

- **Citizenship:** U.S. Citizen Only
 - **Degree:** Doctoral Degree received within the last 60 months or anticipated to be received by 6/30/2020 11:59:00 PM.
 - **Discipline(s):**
 - **Chemistry and Materials Sciences** ([2](#) )
 - **Computer, Information, and Data Sciences** ([3](#) )
 - **Earth and Geosciences** ([3](#) )
 - **Engineering** ([4](#) )
 - **Environmental and Marine Sciences** ([3](#) )
 - **Life Health and Medical Sciences** ([3](#) )
 - **Mathematics and Statistics** ([10](#) )
 - **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).